July 15, 2015

Washington, DC 20548

The Honorable Tim Murphy
Chairman
Subcommittee on Oversight and Investigations
Committee on Energy and Environment
United States House of Representatives

Subject: "Oversight Failures behind the Radiological Incident at DOE's Waste Isolation Pilot Plant."—Response to Questions for the Record

Dear Mr. Chairman:

We appreciated the opportunity to testify before the subcommittee on June 12, 2015, about oversight failures behind the radiological incident at DOE's Waste Isolation Pilot Plant.¹ On July 1, 2015, we received the Subcommittee's questions for the record; the enclosure provides our response. If you or members of your staff have any questions about our response, please contact me at (201) 512-3841 or bawdena@gao.gov.

Sincerely yours,

Allison B. Bawden Acting Director, Natural Resources and Environment

Enclosure

¹GAO, Department of Energy: Actions Needed to Improve DOE and NNSA Oversight of Management and Operating Contractors, GAO-15-662T (Washington, D.C.: June 12, 2015).

Enclosure

Chairman Tim Murphy
Additional Questions for the Record to
Ms. Allison Bawden
"Oversight Failures behind the Radiological Incident at DOE's Waste Isolation Pilot Plant"
June 12, 2015

Question 1: How does a robust and reliable contractor assurance system (a) enhance DOE oversight of high hazard or security sensitive operations and (b) enhance DOE management of M&O contractors?

A robust and reliable, or fully mature, contractor assurance system (CAS)—that is, management systems and processes designed and used by M&O contractors to oversee their own performance and self-identify and correct potential problems—may enhance DOE (a) oversight of high hazard or security sensitive operations, and (b) management of M&O contractors by providing federal overseers with a tool for determining how to prioritize its scarce oversight resources.

A fully mature CAS may enhance DOE's ability to prioritize scarce oversight resources on those contractor activities that are high hazard or security sensitive. Where information from CAS can be relied upon for low risk, low hazard operations DOE could shift oversight resources to high risk, high hazard or security sensitive operations. In our recently released May 2015 report,² we evaluated DOE's and NNSA's framework for overseeing M&O contractors—that has been in place since 2011—which outlines an approach to prioritizing federal oversight resources. Under the framework, federal overseers are to continue to give additional oversight emphasis to high hazard or security sensitive operations, regardless of the maturity of a contractor's CAS; where risk is lower, contractor-generated information in CAS is mature (i.e., reliable), and past contractor performance is strong, federal oversight can rely more on information from CAS. The framework describes a spectrum of approaches that can be employed by officials to oversee M&O contractors depending on the outcome of its assessments of risk, CAS maturity, and past contractor performance. On one side of the spectrum is "transaction-based oversight," or direct, hands-on oversight activities to test or observe contractors' performance through such mechanisms as on-site reviews, facility inspections, and other activities that involve direct evaluation of contractor operations. On the other side of the spectrum is "systems-based

²GAO, National Nuclear Security Administration: Actions Needed to Clarify Use of Contractor Assurance Systems for Oversight and Performance Evaluation, GAO-15-216 (Washington, D.C.: May 2015).

oversight," where federal overseers rely on contractors' processes and information from their CAS.

Similarly, a fully mature CAS may enhance DOE management of M&O contractors by providing DOE with a measure of confidence that a contractor is effectively monitoring its own performance; self-reporting issues that require DOE and/or the contractor's management attention; and continually learning lessons and improving, among other things. Specifically, our May 2015 report identifies the five attributes that NNSA's policy requires a fully mature CAS to include to provide this measure of confidence.³ These five attributes are:

- Assessments: The contractor is to use a robust and effective, risk-informed approach to develop, implement and perform comprehensive assessments of all facilities, systems, and organizational elements, including subcontractors, on a recurring basis.
- Operating experience: The contractor is to establish and effectively implement programs to collect, analyze, and use information from operational events, accidents, and injuries to prevent them in the future.
- Issues and corrective action management: The contractor is to ensure that a
 comprehensive, structured issues management system is in place to track and resolve
 issues identified for correction. This system is to use a risk-informed approach to provide
 for the timely and effective resolution of deficiencies.
- **Performance measures:** The contractor is to identify, monitor, and analyze data measuring the performance of facilities, programs, and organizations. The data are used to comprehensively demonstrate all aspects of performance and project future trends.
- Integrated continuous process improvement: The contractor is to ensure the longterm sustainability and stewardship of the site and use the results of performance measures and other CAS data to achieve improvements in performance.

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³GAO-15-216.

Question 2: Please explain how GAO's recommendations for DOE and NNSA to improve contractor assurance systems comport with the recommendations of the November 2014 Report of the Congressional Advisory Panel on the Governance of the Nuclear Security Enterprise?

The Congressional Advisory Panel on the Governance of the Nuclear Security Enterprise (Panel) issued a report in November 2014.⁴ This Panel was established by Section 3166 of the Fiscal Year 2013 National Defense Authorization Act,⁵ which tasked the Panel to offer recommendations "with respect to the most appropriate governance structure, mission, and management of the nuclear security enterprise." Our report looked at DOE's approach to managing its M&O contractors under its current organizational structure.

a. What particular Panel recommendations will implementation of GAO's recommendations address?

DOE's successful implementation of GAO's recommendations in our May 2015 report would take steps to address at least two recommendations from the Panel. First, the Panel recommended that NNSA should "eliminate transactional oversight in areas where there are better mechanisms for certifying contractor performance." As discussed in our May 2015 report, under NNSA's framework for oversight, when appropriate, NNSA was to place greater reliance on information from CAS, thus reducing transactional oversight in areas where it was deemed appropriate to rely on information from CAS. However, we found that NNSA has not comprehensively established policy or guidance to enable decisionmaking about when reliance on information from CAS is appropriate. If NNSA successfully addressed our recommendation to establish comprehensive policies for such assessments, the agency would be in a better position to determine when it is appropriate to rely on information from CAS and thus address the Panel's recommendation about reducing transactional oversight. Second, the Panel recommended that NNSA should "reshape staffs as needed to implement governance reforms." We recommended that NNSA assess staffing needs to determine whether it has sufficient, qualified personnel to conduct oversight activities consistent with comprehensive policies and guidance including the use of information from CAS for oversight. Implementing GAO's

⁴Congressional Advisory Panel on the Governance of the Nuclear Security Enterprise, *A New Foundation for the Nuclear Enterprise: Report of the Congressional Advisory Panel on the Governance of the Nuclear Security Enterprise* (Washington, D.C.: November 2014).

⁵Pub. L. No. 112-239, § 3166 (2013).

recommendation to assess staffing needs would give the agency additional information needed to address the Panel's recommendation.

b. What other recent work by GAO addresses the advisory panel recommendations?

GAO has not analyzed whether recommendations in other recent GAO work addresses the Panel's recommendations, but a preliminary review of the Panel's recommendations shows that several of its recommendations are similar to those GAO has made in the past. At a high level, the Panel's recommendations are aimed at improving NNSA's effectiveness and efficiency in conducting its work with a focus on organizational structure and the structure of the relationships between NNSA and its management and operating contractors. At this high level, GAO has placed DOE's contract management for the NNSA and Office of Environmental Management on its high-risk list. We designated DOE's contract management—which includes both contract administration and project management—as a high-risk area in 1990 because DOE's record of inadequate management and oversight of contractors had left the department vulnerable to fraud, waste, abuse, and mismanagement. The Panel also made specific recommendations to DOE that are similar to those GAO has made in the past and that are aimed at addressing issues that contribute to DOE's continued inclusion on GAO's high-risk list. These Panel recommendations include:

- Establish trusted Cost Analysis and Resource Management staffs, tools, and data;⁶
- Establish program managers who are provided necessary authorities and resources, and who are held accountable for deliverables;⁷
- Ensure that a strategy and plan to reshape the weapons complex to meet future needs addresses the deferred maintenance backlog;⁸ and

⁶See, for example, GAO, *Modernizing the Nuclear Security Enterprise: NNSA's Budget Estimates Do Not Fully Align with Plans.* GAO-14-231, (Washington, D.C.: Dec. 11, 2013); and GAO, *Department of Energy: Actions Needed to Develop High-Quality Cost Estimates for Construction and Environmental Cleanup Projects.* GAO-10-199, (Washington, D.C.: Jan. 14, 2010).

⁷GAO-15-37 (Washington, D.C.: Dec. 11, 2014); GAO, *Project and Program Management: DOE Needs to Revise Requirements and Guidance for Cost Estimating and Related Reviews.* GAO-15-29 (Washington, D.C.: Nov. 25, 2014).

⁸See, for example, GAO, *Nuclear Weapons: NNSA Needs More Comprehensive Infrastructure and Workforce Data to Improve Enterprise Decision-making.* GAO-11-188, (Washington, D.C.: Feb, 14, 2011); and GAO, *DOE Facilities:*

 Continue ongoing efforts to improve construction project management capabilities (at all levels) by introducing disciplined management practices in order to recapitalize infrastructure on time and on budget.⁹

Question 3: In 2013, the National Academy of Public Administration released a report evaluating DOE's management and oversight of the national labs. Among the report's many conclusions, the Panel recommended that DOE revise its order on Contractor Assurance Systems to provide more explicit guidance designing and implementing mature Contractor Assurance Systems. How will implementation of GAO's recommendations address NAPA's recommendation?

GAO did not evaluate or make recommendations with respect to DOE guidance on how contractors design or implement their assurance systems, the subject of the National Academy of Public Administration's (NAPA) recommendation. GAO's May 2015 report evaluated the comprehensiveness of NNSA's policies and guidance with respect to how NNSA uses information from contractors' assurance systems for conducting federal oversight. Our report does make recommendations for DOE develop guidance on using information from CAS to oversee and evaluate M&O contractors, including how to conduct assessments of risk, CAS maturity, and level of contractor's past performance. If implemented, this would provide additional information relevant to the NAPA recommendation.

Better Prioritization and Life Cycle Cost Analysis Would Improve Disposition Planning. GAO-15-525, (Washington, D.C.: Mar. 19, 2015).

⁹See, for example, GAO, *DOE* and *NNSA Project Management: Analysis* of *Alternatives Could Be Improved by Incorporating Best Practices*. GAO-15-37 (Washington, D.C.: Dec. 11, 2014); GAO, *Project and Program Management: DOE Needs to Revise Requirements and Guidance for Cost Estimating and Related Reviews.* GAO-15-29 (Washington, D.C.: Nov. 25, 2014); GAO, *Nuclear Weapons: Some Actions Have Been Taken to Address Challenges with the Uranium Processing Facility Design.* GAO-15-126 (Washington, D.C.: Oct. 10, 2014); and GAO, *Plutonium Disposition Program: DOE Needs to Analyze the Root Causes of Cost Increases and Develop Better Cost Estimates.* GAO-14-231 (Washington, D.C.: Feb. 13, 2014).